

CLAIMS

1. A multiple glazing element with heat and sound protection properties (1) mounted in a window comprising a first laminated glass pane (10) and at least one second single thickness glass pane (20), parallel to the first pane and separated from the latter by a layer of gas, the laminated glass pane (10) comprising at least two glass sheets (11, 12) joined together by at least one plastic film (13), characterized in that the two glass sheets (11, 12) of the laminated glass pane (10) each have a thickness lying between 1.5 and 2.5 mm, and the single thickness glass pane (20) has a thickness lying between 3 and 5 mm, and that the weight of the glazing element is at least 30% less than the weight of an insulating glazing element which comprises at least two sheets of single thickness glass separated by a layer of gas having the same thickness as that of the multiple glazing element (1), the difference between the weighted sound reduction index R_w of the multiple glazing element and the weighted sound reduction index R_w of said insulating glazing element with two sheets of single thickness glass not exceeding 3 dB.
2. The multiple glazing element as claimed in claim 1, characterized in that the weight of the multiple glazing element is at least 40% less than the weight of the insulating glazing element with two sheets of single thickness glass.
3. The multiple glazing element as claimed in claim 1 or 2, characterized in that the difference between the weighted sound reduction index R_w of the multiple glazing element and the weighted sound reduction index R_w of said insulating glazing

element with two sheets of single thickness glass does not exceed 2 dB.

4. The multiple glazing element as claimed in any one
5 of the preceding claims, characterized in that the
weighted sound reduction index R_w of the multiple
glazing element and the weighted sound reduction
index R_w of said insulating glazing element with
two sheets of single thickness glass are
10 equivalent.
5. The multiple glazing element as claimed in any one
of the preceding claims, characterized in that the
layers of gas have a thickness lying between 6 and
15 20 mm and preferably of 12 mm.
6. The multiple glazing element as claimed in any one
of the preceding claims, characterized in that the
plastic film (13) of the laminated glass pane has
20 a thickness equal to or greater than 0.38 mm.
7. The multiple glazing element as claimed in any one
of the preceding claims, characterized in that the
plastic film (13) is a film giving improved sound
25 insulation properties.
8. The multiple glazing element as claimed in one of
claims 1 to 6, characterized in that the plastic
film (13) is associated with at least one other
30 film providing in particular additional
properties.
9. The multiple glazing element as claimed in any one
of the preceding claims, characterized in that at
35 least one of the glass sheets (11, 12, 20) of the
glazing element comprises at least one functional
coating.

10. The multiple glazing element as claimed in any one of the preceding claims, characterized in that it comprises a single thickness glass pane (20) 3 mm thick, and a laminated glass pane (10) with two glass sheets (11, 12) each 2.1 mm thick.
5
11. The multiple glazing element as claimed in any one of claims 1 to 6, characterized in that it comprises a single thickness glass pane (20) 4 mm thick, and a laminated glass pane (10) with two glass sheets (11, 12) each 1.6 mm thick.
10
12. The multiple glazing element as claimed in any one of claims 1 to 6, characterized in that it comprises a single thickness glass pane (20) 4 mm thick, and a laminated glass pane (10) with two glass sheets (11, 12) each 2.1 mm thick.
15
13. The multiple glazing element as claimed in any one of the preceding claims for the production of glazing elements intended to be installed in buildings.
20
14. The multiple glazing element as claimed in any one of claims 1 to 12 for the production of vehicle glazing elements, in particular motor vehicle glazing elements.
25